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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,599	10/27/2003	Egbert Classen	ZTP01P11003	3516
24131	7590	11/21/2005		
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			EXAMINER ADAMS, GREGORY W	
			ART UNIT	PAPER NUMBER
			3652	
DATE MAILED: 11/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/694,599	Applicant(s) CLASSEN ET AL.	
	Examiner Gregory W. Adams	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2,4-17,19-29 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4-17,19-29 and 32-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States..

Claims 32-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornacchia (US 5,108,255).

With respect to claim 32, Cornacchia discloses an apparatus comprising a support beam 16 transverse to a crossbeam 18, 56, first leg 55 connected to a crossbeam first end 18, 56 and extending down, second leg 55 connected to a crossbeam 18, 56 wherein first leg 55 and second leg 55 clamp goods 22, a hydraulic cylinder 51, 51 connecting a crossbeam 18, 56 to a support beam 16 and extending to raise an lower goods 22.

With respect to claim 33, Cornacchia discloses a crossbeam 18, 56 connected to a support beam 16 for translational movement

With respect to claim 34, Cornacchia discloses a crossbeam 18, 56 pivots on a support beam.

With respect to claim 35, Cornacchia discloses a crossbeam 18, 56 includes a hydraulic driver (col. 6, Ins. 55-69) which moves between a clamped condition with first

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leg 55 moving towards second leg 55 and an unclamped condition with first leg 55 moving away from second leg 55.

With respect to claim 36, Cornacchia discloses a first leg 55 and second leg 55 do not extend below goods units.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2, 4-17 & 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson (US 3,788,500) (previously cited) in view of Shimizu (US 6,814,219) (previously cited).

With respect to claim 2, Lemelson discloses a conveying unit 14 installed in a loading region G.

With respect to claims 4 & 19, Lemelson discloses an apparatus comprising a conveying unit 16 inserted into a transport compartment 25 and conveying goods L, P, a conveying unit 14-16 having a gripping unit 16 and a lifting unit 16 wherein a gripping unit 16 has one gripping unit 16 disposed after another gripping unit 16, and does not disclose a gripping unit having two movable legs. It is noted that Lemelson discloses two gripping units to automatically load and/or unload a transport compartment by traveling adjacent thereto or into a storage compartment. Lemelson Abstract. Shimizu discloses an overhead conveyor gripping unit having two legs 2b that move towards

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each other as in conventional overhead conveyors movable arms provide lift and goods restriction to prevent damage to goods during transit or during intermediate operations to goods during transit from a pick-up region to a set-down region. Cols. 1-2. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Lemelson's gripping unit to include two movable arms, as per the teachings of Shimizu, to lift goods and prevent damage during transit.

With respect to claim 5, Lemelson discloses conveying unit 14 comprising a guide and support unit 15 connected to a gripping unit 16.

With respect to claim 6, Lemelson discloses gripping unit pick-up region G and a guide and support unit above pick-up region.

With respect to claims 7-8 & 22 Lemelson discloses an apparatus comprising a gripping unit pick-up region G, guide and support unit 15 mounted to overhead structure. It is noted that mounting a guiding and support unit to overhead structure, overhead structure comprises building ceilings comprise, frame, & cross members. Therefore, it would have been obvious to mount an apparatus to a ceiling, as taught by Lemelson, such that a guiding unit may extend over a loading region.

With respect to claim 9, Lemelson discloses gripping unit 16 mounted on guide and support unit 15.

With respect to claim 10, Lemelson discloses a guide and support unit 15 end points in direction of transport compartment 22 with a guide and support unit support element 12S, 21 on end 21.

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With respect to claims 11-12 & 14-15, Lemelson discloses gripping unit 16 having one or two degrees of freedom. It is noted that Lemelson discloses a first degree being that in a vertical direction, and a second degree being that in a horizontal direction, i.e. into a loading compartment.

With respect to claim 13, Lemelson discloses a cross member 16, and gripping unit moves which transversely across loading direction 15

With respect to claim 16, Lemelson discloses a conveying unit 14 with rollers 29.

With respect to claim 17, Lemelson discloses a commercial motor vehicle 12.

With respect to claim 20, Lemelson discloses a conveying unit in loading region 14, rollers 29 and support conveying unit 14, 15.

With respect to claim 23, Lemelson discloses a gripping unit 16 mounted on a guide and support unit 15

With respect to claim 24, Lemelson discloses a guide and support unit 15 points into a transport compartment 12 and a supporting element 15S disposed at the end.

With respect to claims 25 & 27, Lemelson discloses a gripping unit 16 moves in one or two degrees of freedom. It is noted that Lemelson discloses a first degree being that in a vertical direction, and a second degree being that in a horizontal direction, i.e. into a loading compartment.

With respect to claim 26, Lemelson discloses gripping units 16 that move transversely with respect to a loading and unloading direction.

With respect to claim 28, Lemelson discloses a conveying unit 16 has rollers 29.

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With respect to claim 29, Lemelson discloses a transport compartment 12 is in a vehicle 12

4. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornacchia (US 5,108,255) in view of Lemelson (US 3,788,500). Cornacchia discloses the claimed invention, but does not disclose cross members connected to a fixed structure. Lemelson discloses fixturing a support beam to an overhead structure, but does not disclose fixturing to a ceiling. It is noted that mounting an overhead rail to overhead structure, overhead structure comprises building ceilings comprise, frame, & cross members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to mount the support beam of the Cornacchia to an overhead structure such as ceilings or beams mounted from a ceiling, to provide for an open floor space.

5. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson (US 3,788,500) in view of Cornacchia (US 5,108,255).

With respect to claim 39, Lemelson discloses:

providing a conveying unit 14 including a support beam, at least one

movable gripping unit and a lifting unit connecting a gripping unit to a support beam;

positioning a gripping unit adjacent goods units in a loading region and the transport compartment 20;

engaging the goods units with a gripping unit

lifting goods units;

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transporting a gripping unit and goods to another loading region and the transport compartment;  
lowering goods units back on a base with a lifting unit; and  
disengaging the goods units from a gripping unit by moving legs away from one another to unclamp the goods units.

Lemelson does not disclose a gripping unit having two legs movable to engage and clamp goods. Cornacchia discloses an apparatus comprising a support beam 16 transverse to a crossbeam 18, 56, first leg 55 connected to a crossbeam first end 18, 56 and extending down, second leg 55 connected to a crossbeam 18, 56 wherein first leg 55 and second leg 55 clamp goods 22, a hydraulic cylinder 51, 51 connecting a crossbeam 18, 56 to a support beam 16 and extending to raise and lower goods 22.

Cornacchia teaches movable arms to grip various sizes and dimensions for stacking or destacking boxes at different locations with great precision. Col. 1, Ins. 20-55.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lemelson's gripper to include arms, as per the teachings of Cornacchia, to various sized and shaped boxes with great precision.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 2, 4-17, 19-29 and 31-38 have been considered but are moot in view of the new ground(s) of rejection. In Amendment submitted September 6, 2005 Applicant amended independent claims 4 & 19 to now recite a gripper having two arms.



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However, with regard to clamping Shimizu clamps goods with two opposed movable arms. Although, Shimizu clamps in a different manner, e.g. from underneath, its clamping places the goods between the arms wherein the goods are engaged by the arms such that a car body, e.g. goods, are lifted and transported between regions.

Also, with respect to gripping good off of or on to a pallet, the ground or some other surface, Applicant is respectfully reminded that the material or article worked upon by the apparatus does not limit apparatus claims. See MPEP 2115.

7. Applicant's arguments with respect to claims 32-38 filed September 6, 2005 have been fully considered but they are not persuasive.

With respect to claim 32, Applicant argues correctly in part that Cornacchia discloses a clamp that can pickup or set down goods with clamping arms oriented horizontally. However, with respect to col. 3, Ins. 5-40, Cornacchia discloses that a gripping unit "has a facility for pickup now which allows pivoting through 90.degree., 180.degree., 270.degree., or 360.degree. from the standing position wherein it extends generally parallel to product support beam 18, to a position perpendicular thereto to a position opposite where it is picked up or a 3/4 turn from the position where the container is picked up." Thus, Cornacchia discloses not only horizontal relationship but vertical orientation. The fact that it discloses an added feature does not preclude the fact that other features read on claim 32.

Applicant further argues that the legs of the cited prior art are not movable with respect to one another. With respect to col. 6, Ins. 50-69 Cornacchia discloses legs that

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extend and retract "so that the load may be depalletized when arms 55 reach the appropriate position on a container such as 22, as shown in FIG. 1."

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th, 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GWA



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